



UNITED STATES DEPARTMENT OF COMMERCE
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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/324,515 06/03/99 SOKOLOV D 1065/5

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EXAMINER

TRAN, K

ART UNIT

PAPER NUMBER

2731

DATE MAILED:

07/25/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.
09/324,515

Applicant(s)

SOKOLOW et al

Examiner

KHAI TRAN

Group Art Unit
2731



☒ Responsive to communication(s) filed on Jun 3, 1999

☐ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire three month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claim

☒ Claim(s) 1-23 is/are pending in the applicat

Of the above, claim(s) _____ is/are withdrawn from consideration

☒ Claim(s) 6-23 is/are allowed.

☒ Claim(s) 1-5 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☒ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☒ Notice of References Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

Art Unit: 2731

DETAILED ACTION

1. The preliminary amendment A filed on 6/05/2000 has been entered. Claims 1-23 are pending in this Office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103© and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Art Unit: 2731

3. Claims 1, and 4-5, are rejected under 35 U.S.C. 103(a) as being unpatentable over Dixon et al (U.S. Pat. 5,396,515) in view of Nakamura (U.S. Pat. 5,216,693).

Regarding claim 1, Dixon et al discloses a cellular telephony searcher, comprising: a plurality of correlators for correlating a received signal with a pseudonoise sequence (Fig.3); an input mechanism for inputting the pseudonoise sequence into the correlators, each of the correlators receiving the pseudonoise sequence with a different delay (a reference registers 33). Dixon et al fail to disclose a delay management mechanism for initializing the delays and subsequently changing the delays, the changing being contingent, for each the correlator, only an output of the correlator.

Nakamura discloses a spread spectrum communications system comprising: a correlator (69) for correlating a received signal with a pseudonoise sequence generated by PN code generator (66); a delay line (a shift register 64) for delaying the PN code (Fig. 13(b)); a delay management mechanism for initializing the delays and subsequently changing the delays, the changing being contingent, for each the correlator, only an output of the correlator (Fig. 12) showing the correlator 53 used to control the delay line in the shift register (51). It would have been obvious to one having ordinary skill in the art at the time the invention was made to control the delay for changing delays from the output of the correlator as taught by Nakamura into the

Art Unit: 2731

teachings of Dixon et al. The motivation would provide a plurality of demodulators that operate in parallel to reproduce a plural number of data at the same time.

Regarding claims 4-5, Nakamura also discloses the input mechanism includes: a pseudonoise sequence generator (63); delay line (a shift register 64) for receiving the pseudonoise sequence and outputting a plurality of copies of the pseudonoise sequence, the delay management mechanism includes: for each correlator, an index register; a multiplexer (66) (Fig.13(b)).

Allowable Subject Matter

4. Claims 6-23 are allowed.
5. Claim 2-3 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
6. The following is a statement of reasons for the indication of allowable subject matter: Dixon et al and Nakamura fail to disclose the cellular telephony searcher comprising: each of the correlator, the delay management mechanism changes the delay corresponding to the each correlator if an estimated absolute value of the output of the correlator is less than a threshold common to all the correlators, independent of an estimated absolute value of the output of any other the correlator as recited in the claims.

Art Unit: 2731

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Fenton et al (U.S. Pat. 5,809,064) disclose pseudonoise ranging receiver which compensates for multipath distortion by dynamically adjusting the time delay spacing between early and late correlators.

Takai (U.S. Pat. 5,978,412) discloses a spread spectrum communications system.

8. **Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

or faxed to:

(703) 308-9051, (for formal communications intended for entry)

or:

(703) 308-6743, (for informal or draft communications, please label "PROPOSED" or "DRAFT")

Art Unit: 2731

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

Any inquiry concerning this communication or earlier communications from the
examiner should be directed to **Khai Tran** whose telephone number is **(703) 305-1876**.

The examiner can normally be reached on Monday-Thursday from 9:00 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's
supervisor, **Chi Pham**, can be reached on **(703) 305-4378**.

Any inquiry of a general nature or relating to the status of this application or
proceeding should be directed to the Group receptionist whose telephone number is
(703) 305-4900.

Kh
Khai Tran
July 24, 2000


CHI H. PHAM
SUPERVISORY PATENT EXAMINER
GROUP 2700

7/24/00